I-405/SR 167 Corridor Executive Advisory Group

















I-405/SR 167 Executive Advisory Group Bellevue City Hall June 18, 2015



Introductions and Agenda

Craig Stone, P.E.

Assistant Secretary, Toll Division



Agenda

- Introductions
- I-405 Master Plan Progress
- I-405 Express Toll Lanes
- Public Comment

2013: I-405/SR 167 Executive Advisory Group

Carpool Policy Recommendation:

3+ Carpool Free Peak

2+ Carpool Free Off-peak

Funding and Phasing Recommendation:

Prefer High Traditional Funding scenario (\$1,175 m), however understanding competing statewide needs, the committee endorsed the Medium Funding scenario (\$960 m)



Cities

- Bothell Mayor Mark Lamb
- Kirkland Mayor Joan McBride
- Bellevue Councilmember Kevin Wallace
- Newcastle Mayor Rich Crispo
- Renton Councilmember Randy Corman
- Tukwila Mayor Jim Haggerton
- Kent Mayor Suzette Cooke
- Auburn Mayor Pete Lewis
- Sumner Mayor Dave Enslow
- Puyallup Mayor Rick Hansen
- Algona Mayor David Hill
- Pacific Vacant

Agencies

- Community Transit Carol Thompson
- Sound Transit Board member Fred Butler
- King County Metro Transit Harold Taniguchi
- Puget Sound Regional Council Dave Gossett
- Washington State Transportation Commission Charlie Royer
- Federal Highway Administration Dan Mathis
- Federal Transit Authority Rick Krochalis
- Washington State Department of Transportation

Counties

- Snohomish County Councilmember Dave Gossett
- King County Councilmember Reagan Dunn
- Pierce County Councilmember Jim McCune

All Corridor State Legislators (Invited)



Welcome

Lynn Peterson

Secretary of Transportation



I-405 Master Plan Update

Kim Henry, P.E.

I-405/SR 167 Corridor Program Director

I-405 Traffic Is Getting Worse

Bad traffic

- Drivers on I-405 experience some of the worst traffic in the state, up to eight hours of congestion each day
- Today the southbound I-405 HOV lane drops below 45 mph 200 days out of the year and I-405 HOV lanes are congested 60 percent of weekdays
- By 2030, employment will grow by 50 percent and the area will see 25 percent more residents

Crowded HOV Lanes

- I-405 HOV lanes are not meeting state and federal requirements to operate at 45 mph 90 percent of the time during peak hours
- I-405 HOV lanes are often just as congested as the regular lanes

Transit Suffers

Congested lanes significantly delay transit trips and reduce reliability

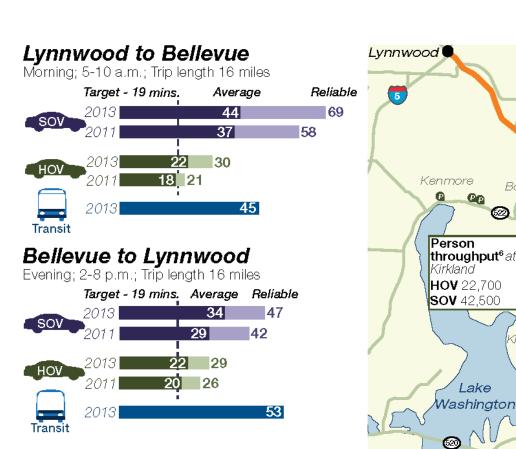






I-405 HOV and SOV travel times are increasing

- Annual vehicle delay on I-405 is up 39 percent in two years.
- In order to plan for a reliable trip, carpools need to increase their planned travel time by 50 percent.
- A reliable trip for an SOV driver requires setting aside almost 70 minutes for a 19 minute trip.





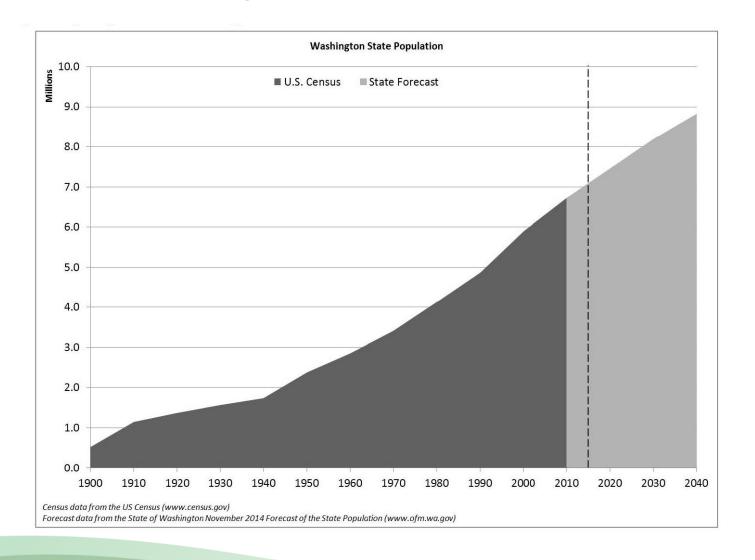
Bothell

Kirkland

Bellevue

Washington State Population Growth

Rapid population growth leads to more traffic





Early partnerships on I-405 Master Plan

1999-2002 I-405 Executive Committee

Cities

- Bothell Councilmember Dick Paylor
- Kirkland Councilmember Joan McBride
- Redmond Mayor Rosemary Ives
- Bellevue Councilmember Connie Marshall
- Newcastle Mayor Sonny Putter
- Renton Councilmember Randy Corman
- Tukwila Mayor Steve Mullet

Agencies

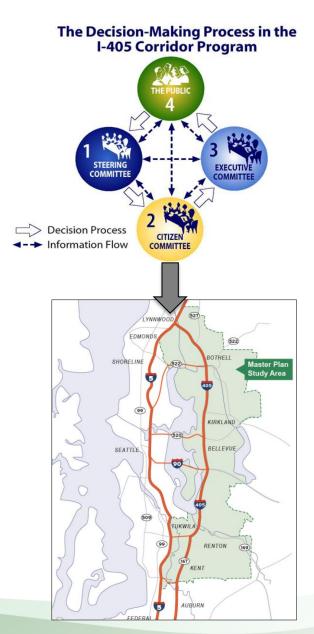
- King County Metro Transit Executive Ron Sims
- Puget Sound Regional Council Board President Bob Edwards
- Washington State Transportation Commission George Kargianis
- Federal Highway Administration Dan Mathis
- Federal Transit Authority Rick Krochalis
- Washington State Department of Transportation John Okamoto

Counties

- Snohomish County Councilmembers Barbara Cothern and Dave Somers
- King County Councilmember Rob McKenna

State Legislators

- Rep. Christopher Hurst
- Rep. Cheryl Pflug
- Sen. Jim Horn
- Sen. Margarita Prentice





I-405 Master Plan

Regional Consensus

EIS Record of Decision, 2002

Roadways

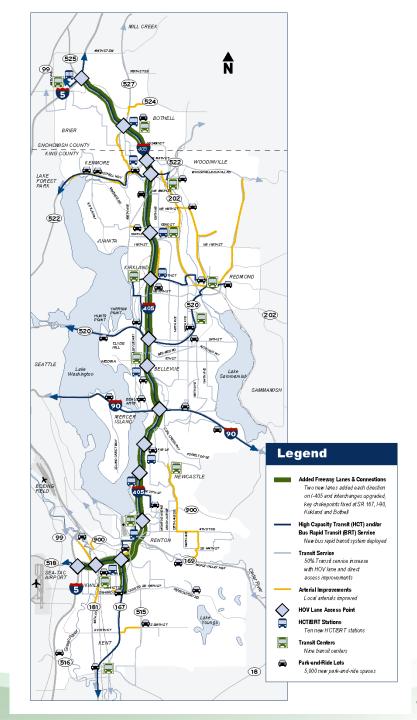
- 2 new lanes in each direction
- Local arterial improvements

Transit & Transportation Choices

- Bus Rapid Transit system
- 9 new transit centers added
- 50% transit service increase
- HOV direct access ramps and flyer stops
- Potential managed lanes system
- 5,000 new Park & Ride spaces
- 1,700 new vanpools

Environmental Enhancements





SR 167 Corridor Plan

Regional Consensus

 Corridor plan published in early 2009

Roadways

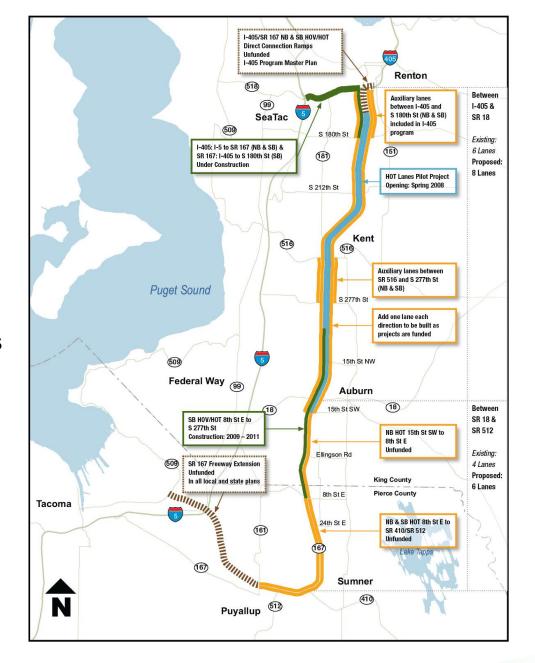
 Adds one to two lanes corridor wide

Transit & Transportation Choices

Includes corridor-wide HOT lanes

Environmental Enhancements

Environmental mitigation projects





I-405/SR 167 Executive Advisory Group for Express Toll Lanes (2009 – 2013)

Cities

- Bothell Mayor Mark Lamb
- Kirkland Mayor Joan McBride
- Bellevue Mayor Grant Degginger
- Newcastle Mayor Ben Varon
- Renton Councilmember Randy Corman
- Tukwila Mayor Jim Haggerton
- Kent Mayor Suzette Cooke
- Auburn Mayor Pete Lewis
- Sumner Mayor Dave Enslow
- Puyallup Mayor Don Malloy
- Algona Mayor David Hill
- Pacific Mayor Richard Hildreth

Agencies

- Sound Transit Board member Mary-Alyce Burleigh
- King County Metro Transit Harold Taniguchi
- Puget Sound Regional Council Sue Singer
- Washington State Transportation Commission Dick Ford
- Federal Highway Administration Dan Mathis
- Federal Transit Authority Rick Krochalis
- Washington State Department of Transportation

Counties

- Snohomish County Councilmember Dave Gossett
- King County Councilmember Reagan Dunn
- Pierce County Council chair Roger Bush

State Legislators

Legislators from the following districts: 31, 41, 45 and 48

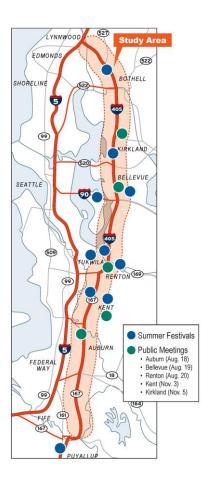


Public Involvement

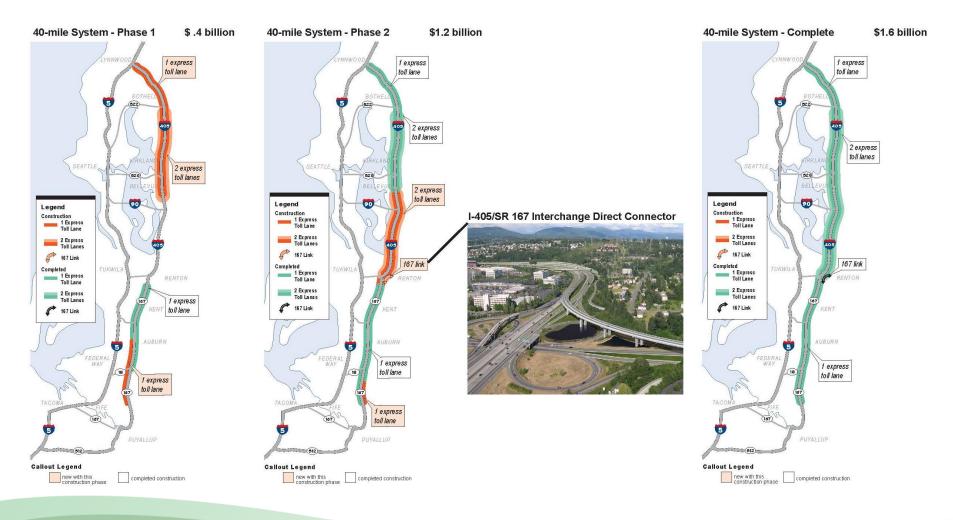
Outreach between 2009-2013 regarding express toll lanes:

- Convened 11 public meetings of the I-405/SR 167 Executive Advisory Group
- Consulted a technical Interagency Working Group comprised of city/county public works representatives and transit agencies
- Hosted booths at 10+ summer festivals
- Received comments from 1,105
 people through comment forms and
 email correspondence
- Hosted eight public open houses throughout the corridor

- Provided 200+ briefings or presentations to community groups, planning organizations, elected officials, and agencies
- Facilitated 12+ corridor focus groups (two with I-405 users and two with SR 167 users, 48 total participants)
- Fielded 2,584 online surveys
- Conducted two statistically valid phone survey of 1,000 I-405 or SR 167 users
- Mailed 220,000 postcards to households in the I-405 and SR 167 corridor to advertise the online survey and open houses



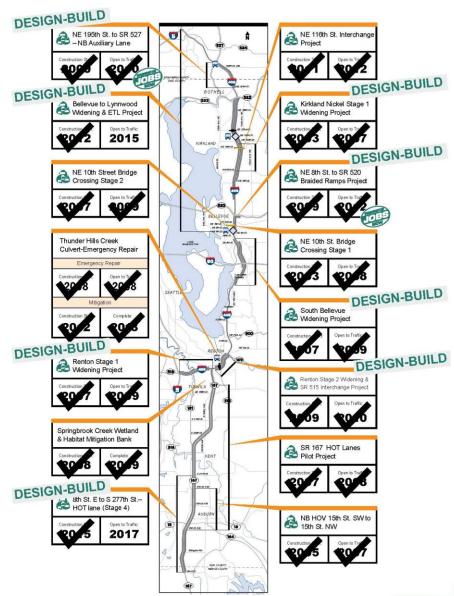
I-405 Master Plan - 10 Year Implementation Strategy





We've delivered 13 projects throughout the corridor on time, under budget

- Initial program investments addressed high-priority chokepoints in Bellevue, Bothell, Kirkland and Renton
- Bellevue to Lynnwood project (expected completion in 2015) is the second step towards a 40-mile corridor managed lanes system
- \$1.3 billion delivered on schedule, under budget





I-405 Master Plan: Multimodal and making progress

Add 2 lanes in each direction 30% complete



Local arterial improvements 50% complete



Transit station and BRT expansions 70% complete



Park and Ride expansions 80% complete



Transit service increase 40% complete



Direct access ramps 45% complete



Vanpool service increase 30% complete



Managed lanes system 40% complete



Pedestrian/bicycle improvements 25% complete



Next Steps: Completing the 40-mile system

The back bone to Bus Rapid Transit

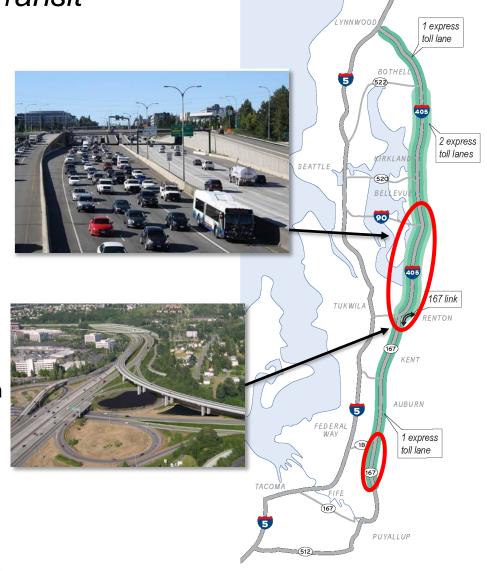
Phase 1: Funded

- Bellevue to Lynnwood Widening and Express Toll Lanes – under construction, open mid to late 2015
- SR 167 Stage 4 PE/RW/Construction funded, open 2017

Phase 2: Unfunded

Benefit/Cost: 4.7

- Renton to Bellevue Widening and Express Toll Lanes – \$890 m
- I-405/SR 167 Direct Connector \$285 m
- SR 167 Stage 5
 - \$35 m PE/ROW/CN unfunded



Sound Transit Update

David Beal and Andrea Tull

Sound Transit







System Plan (ST3) Timeline:

2015

Draft Priority Projects List May 2015

Public Input on Draft Priority Projects List

June - July 2015

Public Involvement

Board Advances Priority Projects List

Aug. 2015

Detailed Testing and Evaluation of Priority Projects List

Aug. - Dec. 2015

2016

Draft System Plan and Public Involvement

Jan - Mar. 2016

Public Involvement

Final System Plan Development

Apr.- May 2016

Adopt System Plan

June 2016

Possible Public Vote on System Plan

Nov. 2016



Draft Priority Projects List Categories

Deferred Projects

 Capital projects that were voter-approved in Sound Move and ST2 but were deferred due to funding limitations. These projects, depending on schedules, could be prioritized by the Board and funded out of existing tax levels.

Enhancements Supporting the Existing System

 Projects that can provide opportunities for improved or additional service along the existing ST HCT system

Corridors from ST2 High-Capacity Transit Studies:

Both the LRT Spine and additional corridors

System-wide programs and studies from the 2014 Long-Range Plan (LRP)

Programs to fund system-wide enhancements and 2014 LRP listed studies

Supporting System Expansion

Facilities and services to support the ST HCT system as it expands



I-405 BRT

The I-405 Master Plan (2002) identified Bus Rapid Transit as the preferred high capacity transit mode in the corridor.

BRT projects and service were to be developed incrementally as funds were secured.

Sound Transit has implemented many projects in the I-405 Corridor.

WSDOT is in the process of implementing Express Toll Lanes between Bellevue and I-5.



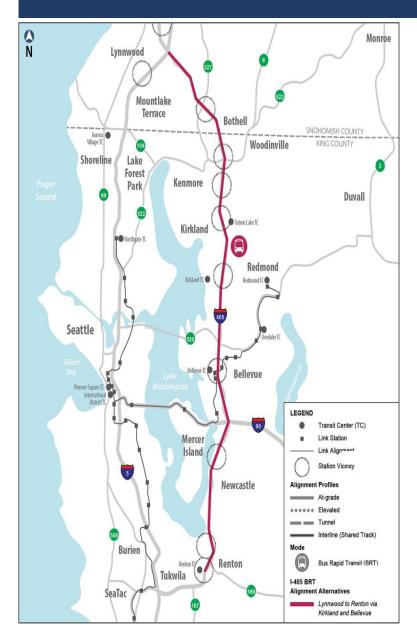
ST Investments in I-405 Corridor

Sound Transit Projects completed in the I-405 Corridor

- Ash Way park and ride
- Ash Way transit access
- Lynnwood HOV direct access ramp
- Lynnwood Transit Center/Park and Ride
- Canyon Park freeway station
- Totem Lake Transit Station/direct access ramps
- Totem Lake Transit Center
- Bellevue NE 6th HOV direct access ramp
- Bellevue Transit Center
- Tukwila Sounder Station



I-405 Bus Rapid Transit—HCT Corridor Study



With full build out of WSDOT I-405 Master Plan transit-supportive elements

- Single route BRT
- Trunk and branch BRT

With WSDOT I-405 Master Plan Phased Plan

- Single route BRT
- Trunk and Branch BRT

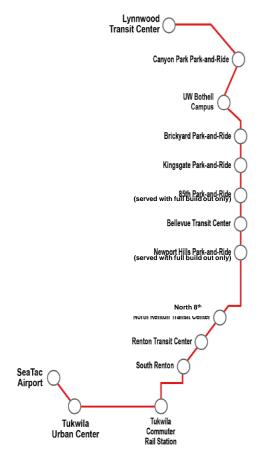


I-405 Master Plan Elements

Projects	Full Build-Out	Next Phase of Full Build out Plan	
Freeway to freeway direct connectors	I-405 to I-90 I-405 to SR 167 SR 520 to I-405 I-405 to I-5 (Tukwila and Lynnwood)	I-405 to I-90 (WB to SB, NB to EB, WB to NB, SB to EB) I-405 to SR167 (SB to SB, NB to NB) SR 520 to I-405 (WB to SB, NB to EB)	
Express toll lanes	Two lanes each direction	2 lanes south of SR 522, 1 lane north of SR 522	
Direct access ramps	Canyon Park 240 th Street SE SR 522 NE 160 th Street (Brickyard) NE 85 th Street NE 6 th Street Extension N 8 th Street (Renton) Rainier Ave Tukwila Sounder station	Planned by WSDOT Planned by WSDOT and Bellevue Planned by WSDOT and ST	
In-line BRT station	112 th Ave SE		

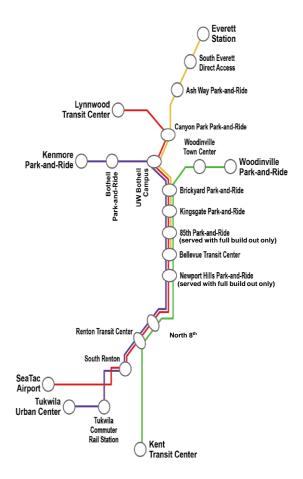


BRT Service Options



Single Route Service

- 10 minute headways all day
- ☐ Operates in Express Toll Lanes
- 85th and Newport Hills not served under With WSDOT I-405 Master Plan Phased Plan



Trunk and Branch Service

- □ 5-7 minute trunk headways, 20 minute branch headways
- Operates in Express Toll Lanes on I-405, in mixed traffic on arterial streets
- 85th and Newport Hills not served under WSDOT I-405
 Master Plan Phased Plan



General Findings

- Daily riders ranged from 14,000 to 25,000
- Reliance on WSDOT implementation of I-405 Master Plan elements and 45 MPH operation of Express Toll Lanes
- Strong access to activity centers and development potential, especially in Bellevue and Renton
- Cost to operate trunk and branch service substantially higher than single route service due to increased bus platform hours
- Cost sharing opportunities



ST3 Next Steps

- August 27: ST Board will update the Priority Projects List based on public and jurisdictional input
- Fall/Winter: Evaluate projects and create templates
 - Includes representative projects and corridors
 - Specific alignments, station locations, access improvements, and other design decisions occur later during project development/ full environmental review process
- Templates will be completed for each project with forecasted ridership range, conceptual cost ranges and other criteria based on the Core Priorities once final list is advanced

DiscussionI-405 Master Plan Progress

Facilitated by:

Craig Stone, P.E.

Assistant Secretary, Toll Division



I-405 Master Plan: Multimodal and making progress

Add 2 lanes in each direction 30% complete



Local arterial improvements 50% complete



Transit station and BRT expansions 70% complete



Park and Ride expansions 80% complete



Transit service increase 40% complete



Direct access ramps 45% complete



Vanpool service increase 30% complete



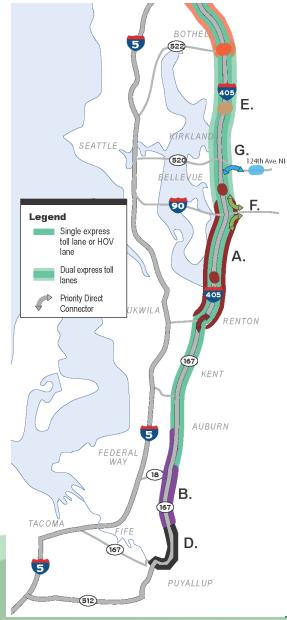
Managed lanes system 40% complete



Pedestrian/bicycle improvements 25% complete



What are the next priorities?



Completing the 40-mile system

•	A. Tukwila to Bellevue - \$1,353* million (WSDOT: \$1,215 m; others: \$138 m)					
	Benefits Benefit/Cost: 4.7 Approximately 50,000 vehicle hours of delay reduced every day which equates to \$276 M in annual travel time savings by drivers.	Renton to Bellevue (Option 4)	\$890	Adds one lane in each direction		
		SR 167 Direct Connector	\$325 (\$40M in PE/RW funded)	- Builds a flyover ramp connecting the I-405 express to II lanes to the SR 167 HOT lanes		
		Sound Transit: N 8th St Direct Access	\$78*	Builds a direct access ramp at N. 8 th St.		
		City of Bellevue: NE 6th St Extension Bellevue Share	\$60*	Extends NE 6 th St. east across I-405 to 120 th Ave. NE		
	B. SR 167 Express Toll L	SR 167 Express Toll Lanes Extension - \$117 million				
	Benefits	Stago A (SR)	\$82 (Funded)	Extends the existing southbound HOT lane to the King / Pierce		

\$82 (Funded)

\$35

· Starts the northbound HOT lane at the King/Pierce County.

Future I-405 Corridor priorities

C. Bothell to Lynnwood Dual Express toll Lanes - \$570 million

Stage 4 (SB)

Stage 5 (NB)

Benefits Benefit/Cost: 1.7 36,000 vehicle hours of delay reduced every day (\$211 M	SR 522 Interchange	\$315	Builds a new direct access connection to SR 522 and redesigns a new interchange. Replaces the northbound I-405 bridge over the Sammamish River and SR 522.
annual travel time savings). Provides a new direct access connection between SR 522 and I-405 express toll lanes eliminating weaving and improving operations for the	SR 522 to I-5 Dual Express Toll Lanes	\$255	 Adds a new lane in each direction between SR 522 and I-5 in Lynnwood to be paired with the existing HOT lane to form a dual express toll lane system.

D. SR 167 Stage 6 - \$300 m

general purpose lanes.

· Benefit/Cost: 2.3

Increases capacity over 50% and

extends the reliability and traffic

benefits of the SR 167 HOT lanes.

Benefit/Cost: 2:5 Reduces vehicle delay by 32,000			 Extends the SR 167 HOT lanes northbound and southbound to SR 410 / SR 512 interchange.
 Project connects regional facilities of SR 410, SR 512, and future SR 167 extension. 	SR 167 Stage 6	\$300m	

E. I-405/NE 132nd St. Interchange – Prior TPA project commitment

Benefits Benefit/Cost: 1.1 Provides new access to and from north Kirkland area and complements 116th interchange which has recently been rebuilt.	NE 132 nd St. Interchange	\$75	 Builds a new half-diamond interchange at NE 132nd St. in Kirkland.
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Projects on other corridors with direct benefits to I-405 (system to system connections)

F. I-90/I-405 Interchange Direct Connectors - \$535 million

Benefits Benefit/Cost: 1.6 Reduces daily delay by 22,000	I-405 / I-90 Renton to Issaquah Direct Connector	\$270	Builds a new flyover ramp between the express toll lanes on l-405 and the HOV lanes on l-90. The ramp would connect Renton to Issaquah.	
	vehide hours of \$112M in annual travel time savings. Reduces weaving and provides high speed reliable trips between the two interstate systems.	I-405 / I-90 Bellevue to Issaquah Direct Connector	\$265	Builds a new flyover ramp between the express toll lanes on I-405 and the HOV lanes on I-90. The ramp would connect Bellevue to Issaquah.

G. SR 520/I-405 Interchange and SR 520/124th Ave NE Interchange - \$550 million

Benefit/Cost: 1.6	Interchange	\$235		configuration
 Reduces delay by 24,000 vehicle hours daily or \$136 M in annual travel time savings. Provides direct connection between I-405 and \$R \$20 and eliminates weaking in the general purpose 	I-405 / SR 520 Direct Connectors	\$315	•	Builds flyover ramps connecting the express toll lanes on I-405 to the HOV lane on SR 520. Ramps will connect Bellevue to Redmond traffic.

Future corridor planning for I-405/SR 167

In 2015, WSDOT invited the following stakeholders to join a reconvening of the I-405/SR 167 Executive Advisory Group and begin planning for future corridor improvements:

Cities

Algona

Auburn

Bellevue

Bothell

Fife

Kent Newcastle

Puyallup

Redmond

Renton

Sumner

Tukwila

Woodinville

Agencies

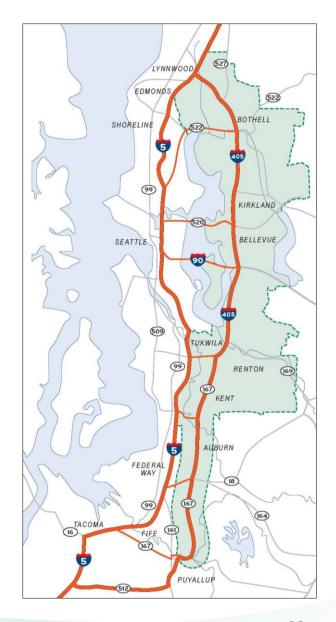
Community Transit
Federal Transit Agency
King County Metro
Sound Transit
Washington State Transportation
Commission

Counties

King County Pierce County

State Legislators

Legislators from the following districts: 1, 4, 11, 21, 25, 30, 31, 32, 33, 37, 41, 45, 47, 48



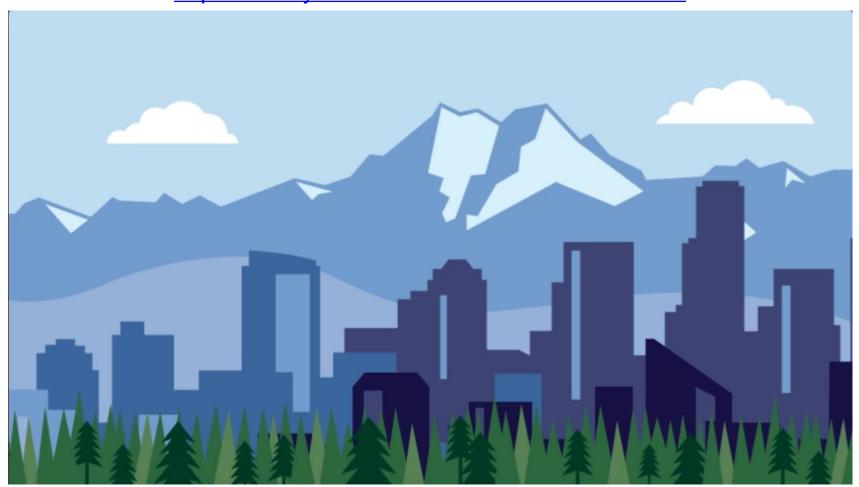
Go Live! Expectations

Patty Rubstello, P.E.

Toll Operations Director, Toll Division

Animated Video

https://www.youtube.com/watch?v=8tzocP4UfZk





What You Need to Know to Use the ETLs

The express toll lanes will operate 24/7

Toll Rates

Typical Toll Range \$1 - \$4.00
Minimum Toll Rate \$0.75
Maximum Toll Rate \$10.00

– Pay By Mail Toll Increment \$ 2.00

Exemptions

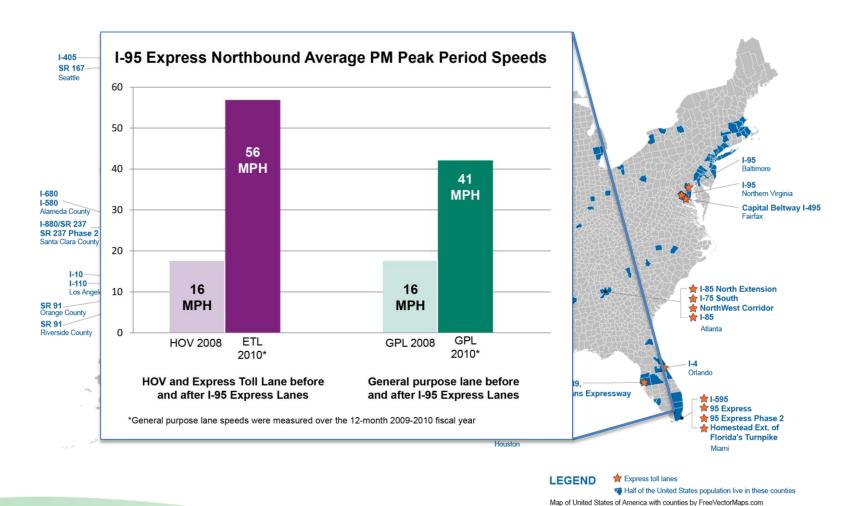
- Transit, vanpools, motorcycles and carpools travel free with a Good To Go! pass
 - Transit Any Good To Go! pass will work
 - Vanpools Any Good To Go! pass will work
 - Carpools Need a Flex Pass set to HOV mode to use the lanes for free
 - Motorcycles Need a Good To Go! pass (Motorcycle, license plate, sticker)
- In-service emergency vehicles, maintenance, enforcement, and incident management vehicles, including private tow-trucks when directed by WSP, pass required

Carpool Policy

- 3+ carpools exempt at all times
- 2+ carpools exempt except 5-9 a.m. and 3-7 p.m. on weekdays

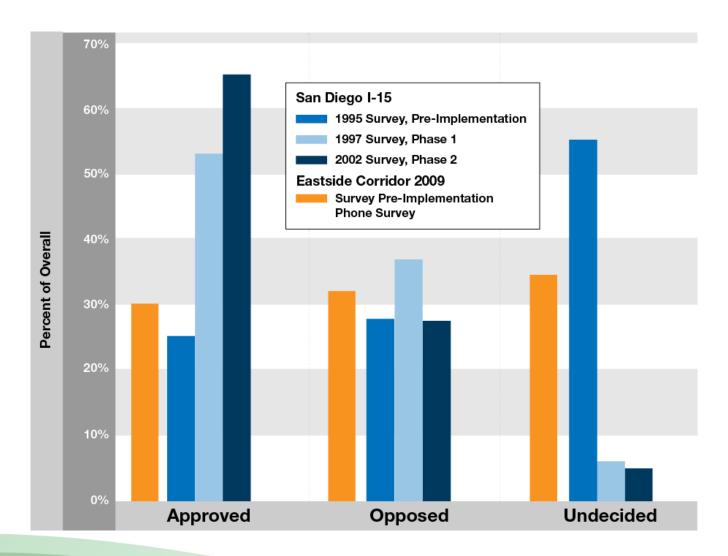


Expectations for Opening – Improved Performance





Expectations for Opening – Public Acceptance





Expectations for Opening – Driver Confusion

- 2+/3+ carpool requirement
- Confusion associated with the access points
- Confusion associated with lane striping
- Repurposed auxiliary lanes

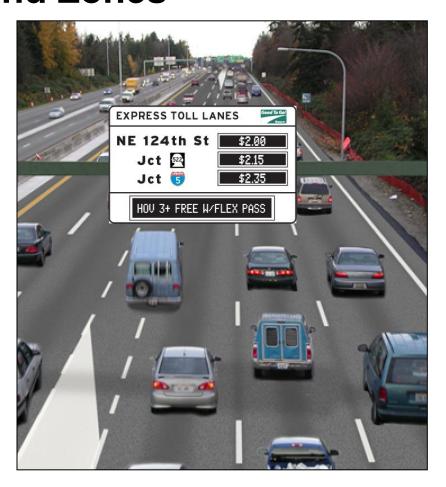


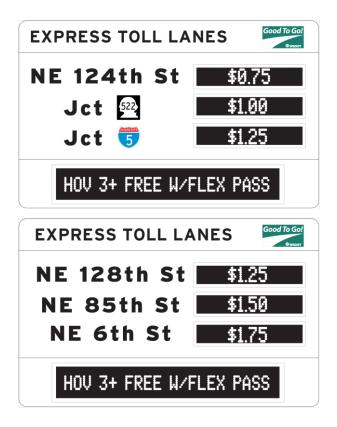






Expectations for Opening - Variable Toll Rates and Zones





Expectations for Opening – Empty ETLs



I-495 in Washington DC



I-495 in Washington DC Photo Credit: Beyond DC



Expectations for Opening – Congested GP Lanes



I-85 in Georgia
Photo Credit: Jason Braverman



Traffic Monitoring Plan

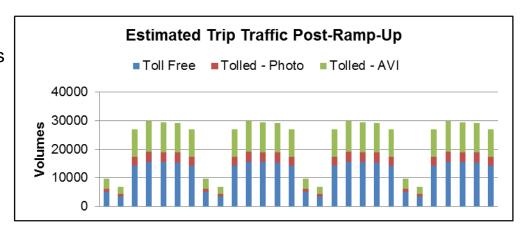
- Similar to other tolling projects, WSDOT will be collecting traffic data before and after the 405 express toll lanes open
- Traffic Performance in ETLs and GP Lanes
 - Speeds
 - Travel Times
 - Vehicle Throughput (vehicles/hour)

Compare Projections

- Carpool and Non-Carpool Trips
- Transponder and Photo Split

Transit Ridership

- ST, CT, and KCM
- Number of Vanpools



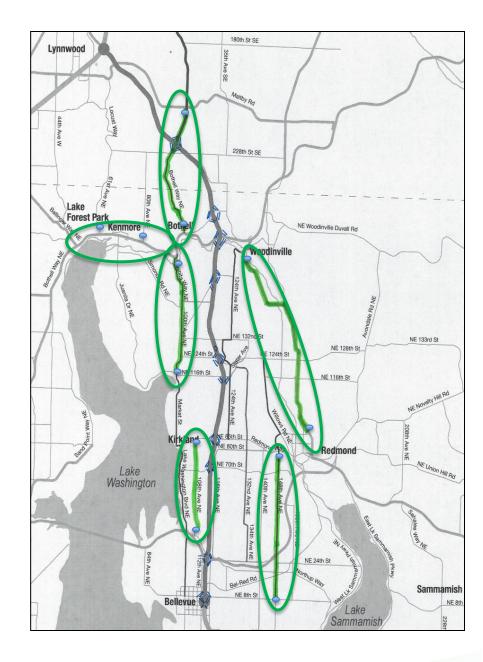
Traffic Monitoring Plan

Impacts on Local Arterials

- Travel times temporary Bluetooth readers
- Volumes temporary tube counters

Data Collection Schedule

- May 2015 (Pre Go-Live)
- August 2015 (Pre Go-Live)
- October 2015
- May 2016
- October 2016



Traffic Monitoring Plan

Safety and Enforcement Data

- Enforcement Along Project Corridor
- Collision Data

Customer Opinion Data

- Good To Go! Account Holders
- Trip Purpose
- HOV Patterns
- Demographics

HOV Patterns

Vehicle Occupancy / People Throughput

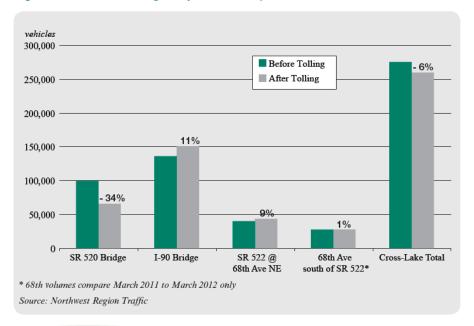


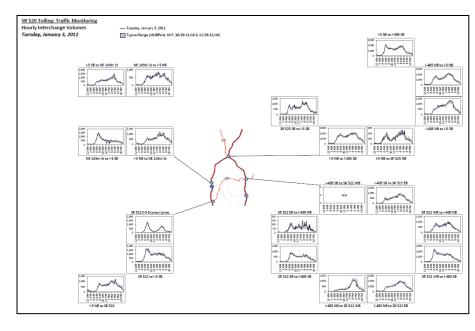
Go-Live Reporting Activity

I-405 Express Toll Lanes Reporting

- Currently finalizing reporting plan
- Saturday or Sunday launch event to prepare drivers before the Monday commute
- Emergency Operations Center staffing and media reports similar to SR 520 & SR 167
- Daily status updates with neighboring jurisdictions and media

Figure 1: Cross-lake average daily volume comparison





Public Education Update

Patricia Michaud

Communications Manager, Toll Division

Challenges

- Express toll lanes are too complex
- Upset carpoolers: Occupancy changes, must have Flex Pass
- Upset motorcycle drivers: Must have active pass
- Skepticism express toll lanes will work
- Fairness
- Tolling a roadway already paid for with gas tax
- Differences with SR 167 HOT Lanes
- Public will wait to engage until the last minute



Schedule

	2014	2014			2015									
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Creative development														
Speaker bureau														
Earned media														
Paid media					All a									







Grassroots outreach

Total Briefings 71

People Reached

1,853

As of June 16, 2015











Incentive Program Data

"It is very thoughtful of you to provide such services to commuters like myself, very much appreciated"

– Amir from Snohomish

Carpool incentive:

- 8,900 free passes distributed
- 1,140 comments received

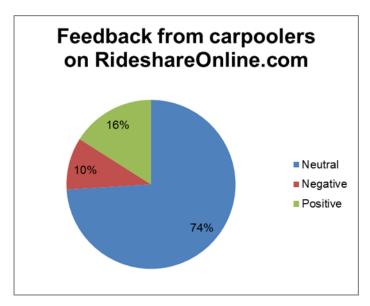
Motorcycle Pass incentive:

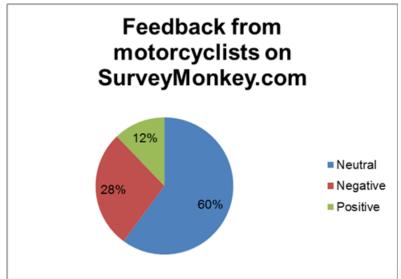
- 1,900 free passes requested
- 170 comments received

Conversations:

Via phone: 340 people

Via email: 475 emails







DiscussionExpress Toll Lanes Go Live!

Facilitated by:

Craig Stone, P.E.

Assistant Secretary, Toll Division



For more information

goodtogo405.org

goodtogotolling@wsdot.wa.gov

www.wsdot.wa.gov/tolling/405